Part A. Basic Information

The *Basic Information* section is required for all publicly and privately owned treatment works (POTW) applicants.

A.1.-A.2. Reserved

A.3. New Versus Existing Discharger

Is this POTW currently covered under an NPDES/IPDES permit? ○ Yes ◉ No

A.4. Collection System and Flow

Provide information on municipalities and areas served by the POTW. Provide the name and population of each entity and provide information on the type of collection system (combined versus separate) and its ownership (e.g., municipal or private).

Name of the Municipality or Service Area	NPDES/IPDES Permit Number (if applicable)	Population Served	Avg Household Size	Type of Collection System	Percentage of Collection System that is Combined Sewer System	Ownership of Collection System
City of Moyie Springs		179	2.3	Separate Sanitary	0	Publically Owned

Total population served:179

Total EDUs served:78

A.5. Reserved

A.6. Flow

Indicate the design flow rate of the POTW.
a. Design flow rate.0.056 mgd

Provide the average daily flow rate and maximum daily flow for each of the last 3 years. Each year's data must be based on a 12-month period with the 12th month of "this year" occurring no more than 3 months before the application submittal.

A.7. Collection System

Indicate the types of collection systems used by the POTW and estimate the percent contribution based on the amount of miles of each.

Type of Collection System used by POTW	Estimate the Percent Contribution (by miles) of Each
Separate sanitary sewer (%)	100.00
Combined storm sewer (%)	0.00

A.8. Discharge and Disposal

a. Identify the number and types of discharge points the POTW uses:

- ☑ Discharge of treated effluent: 1
- ☐ Discharge of untreated or partially treated effluent bypasses:
- ☐ Combined sewer overflow points:
- ☐ Constructed sewer overflow points:
- ☐ Other:

b. Does the POTW discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States? ○ Yes ◉ No

c. Does the POTW apply treated wastewater (recycled water) to an application site? ○ Yes ◉ No

d. Does this POTW discharge or transport treated or untreated wastewater to another facility? ○ Yes ◉ No

e. Does the POTW's discharge or disposal include methods not identified in the *Discharge and Disposal section (e.g., underground percolation, well injection)*? ○ Yes ◉ No

Contractor Information

Are any operational or maintenance aspects related to wastewater treatment or discharge of the POTW the responsibility of a contractor? ○ Yes ◉ No

Select an outfall

Outfall: 1

A.9. Description of Outfall

Outfall Number:1 a. Is this outfall a bypass? ○ Yes ◉ No
Outfall Title:Kootenai River Outfall
Location (Zip Code, City, County, State):83845 MOYIE SPRINGS BOUNDARY ID
Latitude (N): 48.71295 Longitude (W): -116.18872
Distance from shore (if applicable):3 ft
Depth below surface (if applicable):0 ft
Average daily flow rate:0.056 mgd
b. Does this outfall have either an intermittent or a periodic discharge? ○ Yes ◉ No
c. Is outfall equipped with a diffuser? ◉ Yes ○ No
If *Yes*, identify the type of diffuser: Single Port

A.10. Description of Receiving Waters

☑ I fully understand the implications of IDAPA 58.01.25.100.01 and accept responsibility for ensuring that all other necessary approvals, authorizations, or permits have been obtained.

a. Name of receiving water: Kootenai River
b. Reserved:
c. Name of subbasin (if known):
d. Critical low flow of receiving stream (if available) acute (1Q10): 4490 cfs chronic (7Q10): 4591 cfs
e. Total hardness of receiving stream at critical low flow (if available): mg/L of CaCO3

A.11. Description of Treatment

a. What levels of treatment are provided? Check all that apply.

Treatment category Treatment Process

☑ Primary • OtherFine Screen

☑ Secondary • Sequencing Batch Reactor

☐ Tertiary/Advanced

☐ Other (Describe)

b. Design Removal Rates. Indicate the removal rates (as applicable)

Pollutant	Percentage (%)
BOD5	85
Total Suspended Solids	85
Phosphorus	
Nitrogen	
Other (any other removals that an advanced treatment system is designed to achieve):	

c. What type of disinfection is used for the effluent from this outfall?

1. Identify the type of disinfection used for the effluent from this outfall: • UV Disinfection

2. If it varies by season, describe the disinfection technique:
It is not anticipated that disinfection will vary by season.

d. Does the POTW have post-aeration? ◉ Yes ○ No

Check those boxes that apply:

- ☐ POTW design flow is = or greater than 0.1 mgd
- ☐ POTW design flow is = or greater than 1.0 mgd
- ☐ POTW has or is required to develop an approved pretreatment program
- ☐ POTW is required to submit additional parameter expanded effluent information
- ☐ POTW is required to submit additional toxicity or WET testing information
- ☐ POTW accepts significant industrial user (SIU) discharges or RCRA/CERCLA wastes
- ☐ POTW has a combined sewer system
- ☐ POTW has sewage sludge (Until DEQ has an authorized biosolids program, POTW and TWTDS facilities must continue submitting required reports to EPA)

Part H. Requests

1. Do you intend to request or renew one or more of the variances or waivers authorized under IDAPA or the Code of Federal Regulations? ◉ Yes ○ No

- Waivers

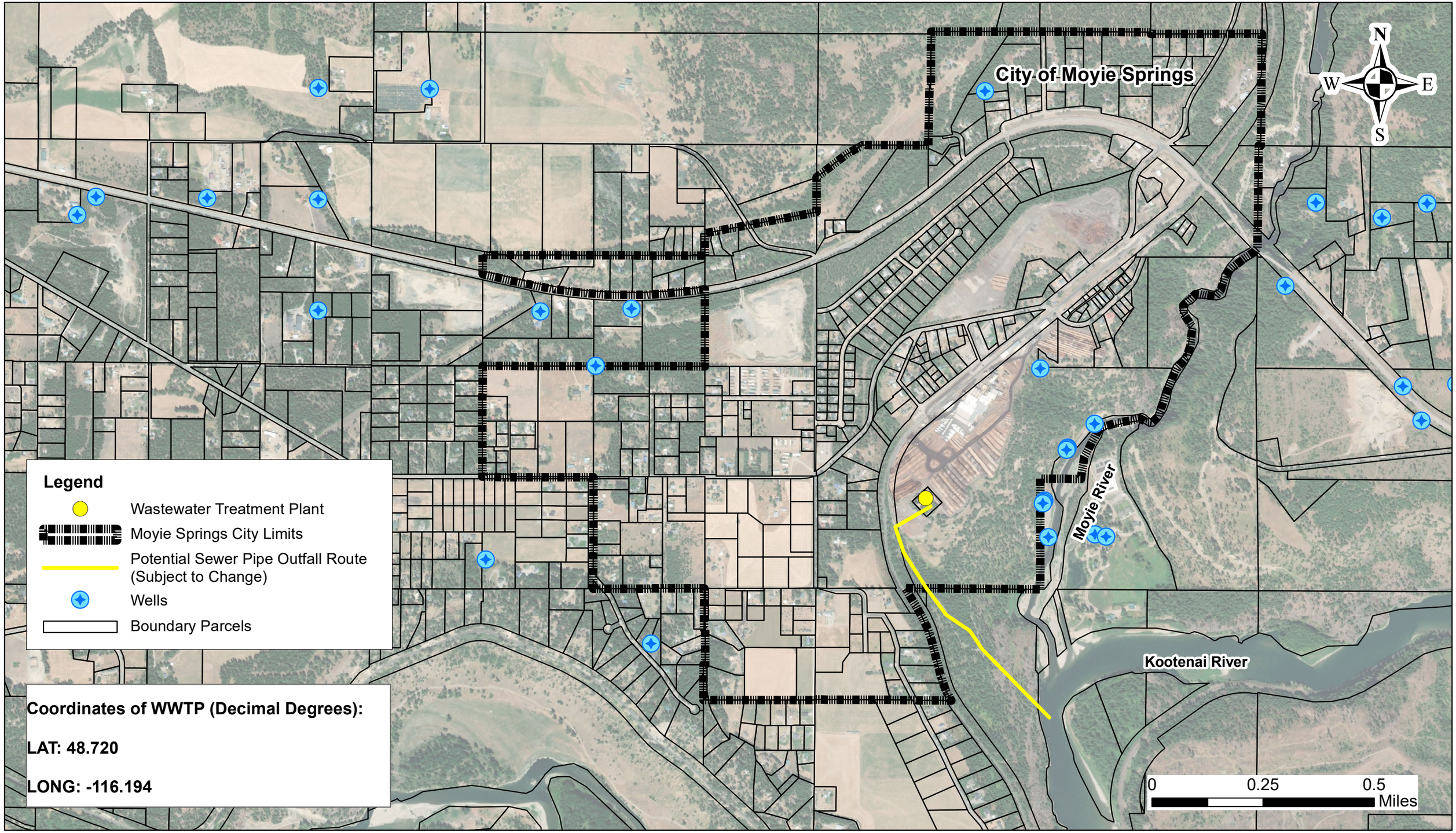
2. Do you intend to request a mixing zone? ◉ Yes ○ No

Part I. Other Information (Optional)

Use the space below to expand upon any of the previous questions or to alert the reviewer of any other optional information you feel should be considered in establishing permit limits for the POTW.
Discharge Information: This application was originally submitted on 8/20/2020 with a design flow of 0.083 MGD. The City received a letter from DEQ on 9/30/2020 stating that the design flow in the application should have been the 2040 maximum daily design flow of 0.133 MGD. The City responded on 10/1/2020, explaining the basis of the design flow (maximum month is the critical flow for the sequencing batch reactor (SBR)). On 10/26/2020, DEQ responded over the phone, and on 10/28/2020 an email was received from DEQ asking the City to resubmit the application based on the 2040 annual average design flow of 0.056 MGD. Waiver Information: The City of Moyie Springs has submitted an Engineering Waiver Application Form for IDAPA's requirement of grit removal. For the size of the project and design flows, the benefit of grit removal does not justify the added cost and maintenance of the grit removal equipment. The project will include provisions in the hydraulic profile and on the site for grit removal to be added if the flows increase beyond the current project. Additional Outfall Information: Several routes were evaluated for the proposed outfall. The least environmentally intrusive involves routing the outfall over a cliffside, after the point of confluence between the Moyie River and Kootenai River. This route avoids dredging/boring through the Moyie River to reach the Kootenai River. Additional information about the effluent pipeline and outfall are listed below: 1) Due to the rocky terrain of the cliffside and the cost of boring, the pipeline will surface, and restraints will anchor the pipe to the cliffside down to the outfall. 2) The outfall will be located so that it is submerged under the low flow level of the Kootenai River. 3) The outfall will be perpendicular to the Kootenai River’s flow. Based on field visits to the outfall location with DEQ, it was observed that the proposed outfall location naturally has great mixing zone characteristics with high velocity flow, boils, and turbulent water on this sharp bend of the river. Due to the small amount of effluent flow compared to the Kootenai River, and the location of the discharge on a river bend, the outfall only has to extend a few feet into the river where it is anticipated to be quickly mixed. It should be noted that the effluent pipeline is sized much larger than what is required for the 20-year projection. Rather than replace the pipeline in the future, the City of Moyie Springs elected for a larger diameter effluent pipe (8-inch). The outfall will be fitted with a cross-T before the diffuser. This cross-T will have two capped ends for future build-out. The current outfall will function with a single-port diffuser, and the City may modify the diffuser to a multi-port in the future. Images showing the proposed location of the outfall have been attached for reference. Videos of the Kootenai River's flow could not be uploaded to the additional information section of this application; however, these videos can be sent via email if requested.

Attach Additional Information

List of Uploaded Documents	Size (MB)
No records to display	



KELLER ASSOCIATES

The City of Moyie Springs, Wastewater Treatment Plant Project

IPDES Topographic Map

Figure 1.0

City of Moyie Springs, ID
July 2020

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on the inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

☑ Check to certify you have read the above language and abide by the language and terms

Name: Steve Economu

Signature Date: 11/2/2020 12:17:50 PM